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ABSTRACT

A study was conducted to develop a monitoring system detailing the employment demands in Bridgeport, Connecticut for graduates of the city's vocational and training programs. The project was divided into two phases and invclved the collaborative efforts of the educational, community, and business-industrial sectors of Bridgeport. A checklist based on existent or anticipated training programs in the city was designed asking respondents to check the anticipated number of job openings for July 1, 1977 and July 1, 1979 in 58 vocational specialties. In the first phase, 131 employers with 50 or more employees were surveyed with 120 responding while 31 of the 100 employers of 10 to 49 employees surveyed during the second phase responded. The results of phase 1 suggested that larger employers do make occupational projections concerning manpower requirements for one and three years hence and are willing to share this information with educational and training programs. Phase 2 results indicated usable projection data for educational or student planning. Twelve recommendations concerning the monitoring system, counseling services, placement services, training programs, and cooperative work experience programs were made, including that the phase one monitoring technique be established as an ongoing system and be implemented on an annual basis. (The survey form is appended.) (EM)

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VOCATIONAL EDUCATION AND TRAINING EMPLOYMENT MONITORING SYSTEM

by

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Final Research Report

HECUS -- The Urban Observatory

H. Parker Lansdale
Director

The research and studies forming the basis for this report were conducted pursuant to a contract between the Department of Housing and Urban Development and the National League of Cities. The substance of such research is dedicated to the public. The authors and publisher are solely responsible for the accuracy of statements or interpretation contained herein.

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PANEL ROSTER

Task #9

Vocational Education and
Training Employment Monitoring System

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Preface

During the course of this research project, many people representing a diversity of interests were involved and provided significant contributions. The distinct cooperation and support of the educational and training institutions and the business-industrial organizations of the Bridgeport community provided very valuable assistance to the researchers in completing the study. H. Parker Lansdale, Executive Director of HECUS and Andrew S. Bullis facilitated and coordinated the cooperation and support.

The researchers were pleased to work with the User Panel which contributed thoughtful and cogent assistance to the conduct of the study. The Panel was composed of representatives from diverse sectors of the community with varied perspectives on the problem investigaged. We would like to thank all of tne members and especially William Hawkins, Executive Director of the Bridgeport Area Chamber of Commerce, William H. Taft, Jr., Executive Vice President of the Manufacturers' Association of Southern Connecticut, Hyung Chung, Director of the Job Market Information Center from the University of Bridgeport and Randy Caballero, Acting President of the Bridgeport Economic Development Corporation.

Other personnel from the Bridgeport community who provided specific and needed assistance to the researchers were: Rose Januska, Ralph LoStocco, the present and past presidents respectively of the Greater Bridgeport Personnel Directors Association, Louise Johnson, Assistant Director of the Bridgeport Office of the Connecticut Employment Service, and Al Horowitz, Office of Research, Connecticut Labor Department.

Del Perreira, a graduate student at Fairfield University and Ruth Plassman, a student at Housatonic Community College worked with the researchers on the project. The project was, therefore, for them an opportunity to obtain some practical experience in research methods and techniques. We offer them our thanks and appreciation for their efforts, particularly in making the initial telephone contacts and follow-up calls.

Our special thanks to Olga Yacco of Fairfield University and Geri Durchak at Housatonic Community College for their painstaking efforts in typing sections of the report and scheduling appointments. Additional thanks are given to Kathleen Teeling for typing the first draft of this report.

We would also like to thank Barbara Bagyura from HECUS for her assistance in coordinating many details throughout the study.

W. Paul Maloney

Charles A. Ekstrom

Precis

The purpose of this study was to develop a vocational monitoring to serve the City of Bridgeport and which could serve as a model for further expansion and development within the surrounding communities. The study entailed joint cooperation and support of University personnel and the educational, community, and business-industrial sectors.

A checklist was designed, tested, and utilized in two phases: In the first phase, employers with fifty or more employees in the City of Bridgeport were surveyed to determine occupational projections for 1977 and 1979 for specific vocational specialties. There were 120 responses from 131 companies selected for a 91.6% response level. The second phase was a continuation of the first phase, but was limited to employers with 10-49 employees.

The results of phase one suggested that such occupational projections could be ascertained by the larger employers and that cooperation could be elicited. Phase two results indicated that surveys of the smaller employers were not feasible for providing useable data for educational or student planning. The researchers recommended the continued implementation of the Phase 1 technique on a periodic basis to facilitate educational planning, student planning and cooperation between the business-industrial sector and the educational institutions. A monitoring system for vocational information based upon Phase 1 was established and recommendations made relevant to its continuance.

CHAPTER 1

Introduction

State and Federal governments have become increasingly concerned with the development and maintenance of a vocational education system which would serve the needs of the people. As early as 1917, the Smith-Hughes Act provided aid to the States in establishing vocational education programs. In 1963 a major legislation called the Vocational Education Act was passed. The purpose of this act was to assist the States to

> "maintain, extend, and improve existing programs of vocational education, to develop new programs of vocational education, and to provide part-time employment for youths who need the earnings from such employment to continue their vocational training on a full-time basis, so that persons of all ages in all communities of the State -- those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market but need to upgrade their skills or learn new ones, those with special educational handicaps, and those in postsecondary schools -- will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training." (1968, p. 1)

In this regard, communities with vocational education programs have had to focus upon local employment and economic conditions in order to maintain and develop requisite training programs. Bridgeport, Connecticut, has been dependent upon manufacturing industries and, as a result, has had a very sluggish economy since 1970. The dependence upon defense contracts, ordinance manufacturing, electrical machines production and metal fabricating industries, which constitute the largest area employers, has created a situation which has produced an unemployment rate which is 4 to 5 percent above the national average.

The total population of the City of Bridgeport in 1970 was 156,542 with a non-white population of 27,082 which constitutes 17.3% of this total. The non-white population in the city increased 74% between 1960 and 1970. (Census, 1971)

Since 1970 the total labor force in the City of Bridgeport has increased by approximately 3.2 percent. This increase is due primarily to 1) young people who are new entrants in the labor market, 2) the increase in the rate of participation of women in the labor market, and 3) the continuing increase in the proportion of minority families in the Bridgeport area. The current unemployment rates for each of these groups is above the area average.

According to previous studies, disadvantaged in the Bridgeport Labor Market Area are about equally divided between white and non-white. Approximately one-fifth are Spanish speaking, usually from Puerto Rico. Welfare recipients make up 25 percent of the total. Youths under 22 years of age comprise approximately one-third, and females over fifty percent. With the reduction in job opportunities because of economic conditions, the disadvantaged are experiencing added difficulties in solving their unemployment problems.

Unemployment problems are disproportionately affecting the Bridgeport minority community. Black and Spanish unemployment rates have been 3 to 4 times above the Bridgeport city average. The black workforce represents 13.8 percent of the total, yet makes up 28.0 percent of the unemployed. The Spanish workforce represents only 9.2 percent of the total, yet makes up 22.6 percent of the unemployed.

In addition, the highest unemployment rate is associated with the youngest worker group. Workers under 22 face a current unemployment rate of 16.9 percent, followed by workers 22-39, at 15.0 percent. These two age groups account for 69.3 percent of the unemployed. These current unemployment problems are concentrated among young and primary age group workers. (1976 Bridgeport Comprehensive Manpower Plan, p. 18).

Employment in the Bridgeport area is projected to grow by 9.7 percent between 1970 and 1980 for a net increase of 15,800 jobs. All of these jobs are expected to come from the nonagricultural wage and salary sector. Projected employment in agriculture during the decade is down by 200, and it is anticipated that there will be 1,200 fewer self-employed, unpaid family, and private household workers by 1980.

Among nonagricultural industries the greatest increase in employment will be in service firms, which will require an additional 6,700 workers by 1980. Trade establishments will also need a substantially greater number of employees in 1980 than in 1970, especially retail firms, for which an increase of 5,000 workers is anticipated. Government, particularly on the state and local level, is expected to employ 2,400 additional people by 1980. On the other hand, employment by manufacturing and construction firms is likely to have 200 fewer workers in 1980 than ten years before. (Bridgeport Area Occupational Outlook 1970-1980, p. 3)

This projected change in the employment potential of the area, coupled with the present high unemployment rate of younger adults, should be noted by the educational institutions within the city, and programs should be developed to prepare or retrain people for the projected jobs. Those educational institutions which should respond to this challenge include the three public high schools, Bullard Havens Technical High School, Housatonic Community College, the Junior College of Connecticut at the University of Bridgeport, Sacred Heart University and Fairfield University.

In 1975 Mayor John Mandanici submitted a proposal to the Bridgeport Urban Observatory to do a study of vocational training at high schools and the community college. The project was selected as one of high priority by the observatory and serves as the basis for this project. The scope of the project was confined to the development of a vocational education information system which had as its principle objective the establishment or a monitoring system.

This monitoring system would be used to project occupational demands within the Bridgeport community. Information will be channeled through this system to educational institutions and manpower programs for the purposes of planning, revising, and implementing vocational education and training. It will also provide a means of facilitating cooperation between the sources of manpower and the employers.

As noted above, the sources for vocational education were expanded from the original list of high schools and the community college to include manpower programs. In addition, the private colleges which operate Associate Degree occupational programs were included in order to obtain a more accurate picture of the range of opportunities available.

The primary purposes of the research were to develop a monitoring system for vocational and training employment information within the City of Bridgeport, to test the system, and make recommendations concerning its feasibility, program constraints, and its continued implementation. If the system were practicable, it could be used as a model for further development and utilization by the participants and other organizations to monitor community needs and be expanded in scope to assess the employment needs and projections for a larger area for example within surrounding communities.

The project was conducted by an inter-disciplinary team from Fairfield University and Housatonic Community College. The researchers involved graduate and undergraduate students in the pursuit of the research objectives. The research was assisted by the contributions of the members of the User Panel representing the educational institution within the city as well as by representatives from the Chamber of Commerce, Bridgeport Economic Development Corporation, Manufacturers Association of Southern Connecticut and the City of Bridgeport Public Schools. In addition, to the members of the User Panel, the researchers were fortunate to have the assistance of the present and former presidents of the Greater Bridgeport Personnel Directors' Association, and the local Connecticut State Employment Service. Thus, the project involved the collaborative efforts of both the educational and training institutions as well as the community in the conduct of the study.

The research was divided into four phases. Phase one entailed an intensive review and analysis of the relevant research and literature pertinent to the aims of the project, specifically monitoring systems and community job surveys. This was supplemented by a series of personal interviews bu the researchers with representatives from the educational, training, and business-industrial sectors of the community plus acquisition of data and materials, i.e., employee lists from these personnel.

The second phase involved the development of the monitoring system with a means of obtaining pertinent data of use to the training institution. In this part of the program, a classification system was selected to facilitate communication among the sectors. This system was developed with the Vocational Career Guide for Connecticut as a basis rather than the Standard Industrial Classification system which had limited applicability to training institutions. A pilot instrument was developed and tested with the User Panel and other key personnel. Phase three was subdivided into two parts. The first part entailed a survey of

the employers in the City of Bridgeport with 50 or more employees. Part two was designed to elicit information from employers with 10-49 emplyees. Upon completion of this phase, the results were analyzed in terms of the effectiveness of the checklist method with both groups and actual analysis of the data obtained.

In phase four the process and the monitoring system were revised, and the results communicated to the User Panel. Program constraints were delineated and recommendations and conclusions specified. A final report was prepared detailing the methods, goals, findings, and recommendations.

The remainder of this report is organized as follows: Chapter II focuses upon the specific conclusions and recommendations of the study. Chapter III is a summary of the entire report. Chapter IV is the review and analysis of related literature and research. In Chapter V the research methodology is presented. Chapter VI is a detailed analysis of the findings followed by the bibliography and appendices with cover letters, the checklist and results of the application of the checklist to the larger and smaller employers in the City of Bridgeport.

CHAPTER II

Recommendations and Conclusions

This chapter is concerned with specific recommendations and conclusions derived from the findings of this research investigation into the establishment of a monitoring system for vocational education and training employment opportunities in the City of Bridgeport. The study was designed to determine the feasibility and practicality of a monitoring system employing a checklist to survey business and industry in the City to ascertain one and three year projections for employment opportunities available for specific vocational specialities.

While the major objectives of the study were to determine whether a monitoring system could be developed and tested, data were derived relevant to employment projections for 1977 and 1979 in the City. Significant findings were derived particularly from employers with 50 or more employees from whom returns were received from 91.6%, 120 of the 131 surveyed. With the smaller employers with 10-49 employees, the response level was insignificant.

The data and findings must be interpreted with caution and should not be overgeneralized. The number of responses, the number of openings, and the percentage of responses varied both in terms of the specific categories on each checklist and also overall terms. This does not mean, however, to suggest that the "hard" data are not useable. They simply must be placed in perspective by each interested party concerned with vocational education and training.

The researchers hope that the recommendations and conclusions will lead to significant dialogue among the professionals concerned with training and employment in the City of Bridgeport. It is also hoped that these recommendations will stimulate discussion, ideas, and new means of communication and program development by professionals concerned with manpower utilization both in the City of Bridgeport and the local environs.

1. It is recommended that the User Panel of this study continue in existence and expand its membership to include representatives from the State Employment Service, the Greater Bridgeport Personnel Directors' Association and other organizations concerned with vocational education and training.

From the interviews conducted by the researchers and results of written comments on the checklist, this was the first attempt made to provide a forum and integrated body of representatives from the vocational and training sectors, as well as the business-industrial sectors within the City of Bridgeport. Such a group could facilitate communications among the sectors directly involved in both training and employment.

Specifically, such a panel of interested, concerned, and cognizant representatives could serve to improve the communication process between training programs and employers and make such communication a two-way channel through which both sectors could have input of significance and relevance to their counterparts.

First, such communication could help make the training institutions responsive to employer needs in terms of specific programs of long or short duration which could be implemented by the participating institutions. Secondly, employers could benefit by having data made available to them concerning enrollment in the specific programs provided in the city which could be utilized in their planning process for expansion or development of their employment activities. Thirdly, the training institutions would be able to gauge more accurately and with greater specificity on a longitudinal basis how their graduates are progressing and through longitudinal followups receive input on the effectiveness and efficiency of their programs. Fourthly, with the economic necessities of the employment market and consequent fluctuations, the training institutions could cooperate in planning programs which would prevent needless and unnecessary duplication of capital and personnel expenditures in providing new avenues of vocational training. A case in point is the recent arrangement between the city schools and Bullard Havens Technical School for shared time "programs" for city high school students.

Considering that the highest unemployment in the city is found in the 16-34 age group, there is need for closer and more specific articulation and cooperation among the high schools, technical school and community and junior college programs to assist youngsters in understanding the kinds of training available, and the relationship between high school and post-high school programs. This articulation could be provided by the communication among the relevant institutions.

Finally, organizations such as the Chamber of Commerce and Bridgeport Economic Development Corporation could benefit from this participation. The participating members of the Panel could provide program and enrollment data to assist in attracting business to Bridgeport.

The benefits, therefore, to be drived by its continuation and periodic convention are manifest and multifacted. Educational and training programs, business and industry, the city, and students could be assisted by this mutual cooperation and support.

2. It is recommended that the vocational education and training employment monitoring system be established as an on-going system.

The findings of this study suggest that a monitoring system can be, in fact, established in the City of Bridgeport to provide relevant and current data about employment projections for one and three years hence. It was found that employers with 50 or more employees can and do have data available to make projections for one year and three years ahead. Secondly, they are willing to share this data with institutions and agencies involved in providing vocational training as indicated by the 91.6% response from these companies. One hundred and twenty companies out of 131 returned the checklist with data that were useable. The results were indicative of openings and potential growth in many occupations. The cooperation, support, and encouragement from these organizations was not only noteworthy but also gratifying.

Utilization of the research methods in this study is a valid and dependable method of implementing the system. Particularly important, at this time, is maintenance of confidentiality. It seems that the companies were willing to assist in the research provided they were not mentioned specifically in this report. Prior telephone contact to request their participation coupled with persistent telephone followup seemed to facilitate the response level achieved.

The data derived from this method of surveying is not currently available through other sources with the specificity and nomenclature employed. Since the State Department of Labor surveys cover areas rather than specific cities and are limited to those companies willing to participate, these surveys do not pin point the needs as detailed in this study. In addition, much of the information available from other sources is expressed in industrial groups not in specific vocational specialities.

While it is admitted that conditions may change and, hence, the data be subject to fluctuation as a result, provisions could be made to enhance and improve the system to remedy this potential difficulty. It might be possible to randomly sample these employers by phone to ascertain any significant changes in business conditions which would influence the data. In addition, if the data are accumulated and analyzed over time, greater specificity in terms of longs term trends could be achieved.

In sum, therefore, the system can monitor employment projections for one and three year periods. The data are specific and accurate enough to be employed by the participating agencies for curriculum revision, deletion, and development for fields with adequate response levels and projected openings.

3. It is recommended that the User Panel and the Director of HECUS contract the services of a consultant to continue the actual implementation of the monitoring system.

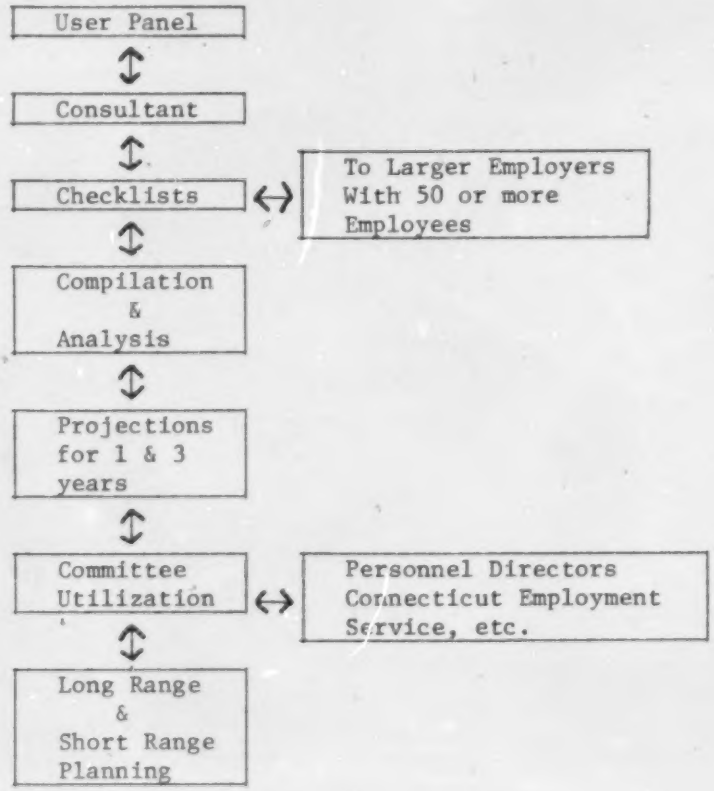
The continuation of the monitoring system is dependent upon a number of considerations. First is the useability of the information derived from the system and its effectiveness for program planning by the participating representatives from vocational training programs. Since the data can be used for these purposes, the value of the system seems established.

The fundamental issue to be resolved is responsibility for its maintenance. Considering the financial constraints of educational and community based agencies in recent years, cost factors may be prohibitive if assumed by one organization. The monitoring system, however, gains practicability if the costs are shared by participating programs with an interest in these data.

Two other factors involved are expertise and time. In many cases, the personnel with sufficient expertise may be unavailable to conduct the survey and devote attention over time to the project. In addition, personnel with other commitments in the participating institutions may not have sufficient time to devote to the project.

Thus, the involvement of a consultant with the expertise and time may be the most feasible means of maintaining the system and continuing it with minimum expense for all concerned.

In the flow chart in figure I, the responsibilities and lines of communication between the User Panel and project director are specified and delineated. The director or consultant would be responsible for conducting the survey of larger employers with 50 or more employees annually. The checklist would be revised according to current programs available and sent to the larger employers. Upon receipt of the responses, the consultant would compile and analyze the results detailing the trends and new areas of expansion, decline, or development. This data could be supplemented by input from the Personnel Directors Association, the Connecticut State Employment Service, Building trade council, Professional associations, and the User Panel. The data and findings could then be utilized by participating institutions and agencies for long and short range planning.



The continuing of the monitoring system with subsequent refinement of its operation through the use of computer facilities could provide data over time which would be of even more value than that which has been obtained thus far. The results of these surveys over the next few years would give substantive data regarding projections for employment in the City of Bridgeport and could suggest some additional areas for program development. Community employment trends by occupation and short and long term trends of labor demands would be available, then, for planning purposes both by institutions and students in the respective educational and training programs.

In addition to these features are a number of other unique features of such a system. Information and data would be accessible, integrated, accurate, and current. The system would have the capacity for continuous updating and detail the local data for a variety of occupations.

4. It is recommended that the monitoring system be implemented annually in October.

This recommendation actually consists of two sections; one dealing with the frequency of the updating, and the second with the most suitable time of year for the updating. Considering the general difficulties in conducting a survey, obtaining cooperation, and adequate returns for significant results, it is suggested that the updating be done yearly with one year and three year projections included. Considering the time constraints on personnel directors, and the possibly negative reactions to too frequent surveying of these personnel and since projections seem to be derived primarily on the basis of recent employment statistics, more frequent surveying, it is doubted, will yield the substantive and accurate data made available on a yearly basis.

While the researchers developed the system and obtained data during the summer months, specifically July and August, this was not the optimum time for surveying the local business and industries. It was determined through interviews and telephone contacts with the employers that May and June were unsuitable for such a survey since many companies are committed to completing federal reports and other year-end reports during this time. July and August are generally interrupted by vacation periods and plant shutdowns. In addition, the recent schedule change in the federal fiscal year to end on September 30 suggests that September is not an optimum time.

In view of these facts and the need to have current data based upon recent employment data, it seems that October would be the optimum time for yearly updating. Federal and other reports would be completed at this point and employers would have their most recent employment statistics from June through September to use as a basis for projections.

5. It is recommended, at this time, that there be strict confidentiality of response when the survey is conducted.

In conducting this study, it was found that generally employers were concerned about being identified in the report. This concern seemed to focus upon informing the competition what their one and three year plans were through their employment projections. Secondly, on the basis of interviews,

the researchers received the impression that the employers did not want to be overwhelmed by inordinate numbers of job seekers at their door. Finally, it was not the intent nor an objective of the monitoring system to utilize the data and information derived for specific placement purposes in terms of matching a prospective job seeker with a specific business or industry. Some modification of the system for this placement purpose may be feasible at a later date as indicated in a subsequent recommendation.

6. It is recommended that the scope of the monitoring system be enlarged to include Stratford and then the surrounding communities.

Since the research findings suggest the feasibility of the monitoring system for use with the larger employers with 50 or more employees, the system can provide data that is useful for institutions and students. Considering that the largest group of residents in the city that work elsewhere actually are employed in Stratford and that Stratford seems to be the most accessible of the surrounding communities for the poverty group in the city, a survey to include employers in the City of Stratford seems to be pertinent and relevant to the functions of the monitoring system. Of the communities adjacent to the City of Bridgeport, Stratford has the largest number of employers with business and industrial interests and needs for employees with specific vocational training and skills. In the event, therefore, that the Panel decides to expand the scope of the survey, then Stratford, in view of these facts, is the most desirable community in which to conduct the survey. This does not mean to suggest that the other communities' participation is not desirable, but rather than in terms of priorities, Stratford would be the top priority.

7. It is recommended that the list of employers with 50 or more employees be continually updated by cooperation of the State Labor Department, Chamber of Commerce, BEDCO, and other agencies.

One potential difficulty in utilization of the monitoring system which the researchers experienced was in locating the names and addresses of the larger employers with 50 or more employees in the City of Bridgeport. By coordinating lists from the State Labor Department, the Chamber of Commerce, BEDCO, the Manufacturers Association, the Greater Bridgeport Personnel Directors Association, and the Directory of New England Manufacturers for 1976, the researchers were able to develop a coordinated list which in numerous instances had to be revised as a result of telephone contacts. There is a need for a unified list, using the standard industrial classification system according to size, developed and maintained by interested organizations. It would facilitate not only the use of the monitoring system, but also communication among interested parties and prospective businesses which might relocate to Bridgeport if they know what suppliers are available and their size.

8. It is recommended that participating training institutions refine their enrollment data to determine the number of current and future graduates who will be prospective job seekers in the City of Bridgeport.

While enrollment data for participating institutions were, in some cases, made available, the data were not employed in this study because of potential confusion and misleading conclusions which might be drawn as a result. It is

not feasible to simply compare the number of individuals enrolled in vocational and training programs with the number of job openings. In many cases, the graduates will not enter the labor market upon graduation but will continue other training or education in or outside of the city environs. In addition, some will enter the armed forces, or pursue a program in higher education, or be employed outside the city.

If a comparison of actual labor supply and labor demand is to be achieved, each institution needs to identify the number of trainees who will, in fact, become prospective job seekers in the city upon completion of their training. Some of the particpating institutions had students from out of town, as well as out of state, who had no intention of seeking employment in the City of Bridgeport. Their inclusion, therefore, in any comparison suggested above would not accurately reflect the anticipated or actual conditions, and, thus, would distort the findings and conclusions.

9. It is recommended that the particpating training institutions consider the findings, expand current programs, and implement new training programs.

While a direct comparison between the labor supply and labor demand for 1977 and 1979 was not feasible due to the problems raised in recommendation 8 above, a simple inspection by the researchers of data, programs, and current enrollments suggested that some fields with significant openings were underenrolled or did not have correlative programs of training. Training and educational programs are needed for bank managers, general clerks, clerk typists, electronic technicians, bank tellers and tool and die makers. There were also indications of under enrollment in other specific areas. It is recommended, therefore, that the education and training institutions consider these findings, discuss them, and attempt to meet these needs.

10. It is recommended that cooperative work experience programs be expanded by the participating institutions.

In view of the current emphasis upon career and vocational education, as well as the findings of this study, some areas of potential employment for high school, technical school, junior college and community college students may suggest the need for expanded facilities and programs. In some cases the expenses to institutions in terms of capital and personnel expenditures may be prohibitive. A more feasible method of meeting these needs may be in the development of cooperative work experience programs in these areas with business and industry. These programs could provide participants with actual on-the-job training in specific vocational skills as well as prevent needless monetary outlay by the institutions. This would seem to be an especially practical solution in the case of a small number of openings in a well defined vocational specialty.

11. It is recommended that the data and findings of this study be communicated to counselors in the participating institutions.

Since a large percentage, particularly of high school students and community college students, generally remain in this community after completing their education, youngsters within the educational and training programs in the city

could use these data. Generally in an urban environment, fifty percent of the graduates reside in the local community and seek employment there. In view of this information, students in the City of Bridgeport need specific, accurate, and current data regarding potential employments trends and openings.

Thus, having these data available, counselors would be in a better position to counsel and advise youngsters of their prospects for employment in the city. The data could be employed in program planning and career education programs to inform students of the anticipated labor demands in the city. It could also help counselors to understand the dynamics of the Bridgeport labor market for one and three years ahead. As the system continued in operation, more specific trends could be identified in relation to local and national economic indicators.

12. It is recommended that the data and findings of the report be communicated to placement personnel in participating institutions.

Since in many cases the placement officer is concerned with immediate employment concerns of the graduates, the findings of this study seem quite pertinent to this work. For seniors in the programs or potential graduates, the data for 1977 would be particularly relevant since the number of openings in the city would be available.

Placement personnel may be able, as a result of the investigation, to develop specific contacts and information about openings with employers in the city. Further cooperation, it is hoped, will be developed to assist both institutions and students concerned with the labor market in Bridgeport.

Conclusions

The researchers have concluded that the monitoring system is a feasible and practical means of providing the necessary information and data relevant to vocational training and education in the City of Bridgeport. Data of this nature derived from this study can be effectively and efficiently utilized in revising and developing vocational curricula. In addition, the communication of the data to professionals involved in training can assist them in counseling and advising students who will be entering the labor market in the city.

It is hoped that the communication and cooperation exemplified during the course of this investigation will be continued and enhanced by all sectors of the community to facilitate further expansion of the current programs to meet both business and student needs. The City of Bridgeport is in a unique situation in reviewing the support provided by the business and industrial sectors in identifying employment needs and projections.

With the fluctuations and viscissitudes of the labor market over time, it is apparent that current reliable and useable information is necessary for effective decision-making. The researchers concluded that the monitoring system can provide this data input to improve curriculum planning by institutions participating in this effort. Hopefully this will enhance the employment of personnel in this city.

CHAPTER III

Summary of the Report

The basic purpose of this research was to establish a monitoring system detailing the employment demands in the City of Bridgeport for graduates of the vocational and training programs within the city. Ultimately, if this study provided significant data and an efficient method for its collection, then the model would be used on a continuous basis and expanded in scope to cover surrounding communities in the region.

The representatives of the educational institutions and training programs participating in the User Panel wanted specific information concerning projected openings for graduates of their vocational education programs. With hard data of this nature for one and three years hence, more effective curriculum planning and revision could be implemented. Programs which no demand was evident could be phased out or eliminated with due consideration of the specific occupational needs evident in the community. Conjointly if the business-industrial sector were able to project anticipated growth in occupations which had been constrained to replacement needs only, then programs could be expanded in scope and more students trained in those areas. In addition to program planning by institutions, this data could also be used in counseling students about potential occupational possibilities within the community.

A further objective of the study was to facilitate the communication and cooperation between the training institutions and the business-industrial sectors of the community. Not only would information be available to the training institutions but also enrollment data and program data would be made available to employers within the city and businesses contemplating relocation in the City of Bridgeport. The employers would, therefore, have data for use in this planning and also have a vehicle for expression and communication of these projected occupational needs for one and three years hence.

After a thorough review of the literature and consultation with members of the User Panel representing the business-industry community, it was decided that continuous monitoring of the occupational needs would necessitate a viable means over time. The means in this case was a checklist. The checklist devised was based upon the specific training programs in existence and anticipated programs within the city. A total of 58 vocational specialties were included and respondents were asked to check the anticipated number of job openings for July 1, 1977 and July 1, 1979. In addition, space was provided for entry of specialties not cited on the checklist.

Based upon lists provided by the Chamber of Commerce, Bridgeport Economic Development Corporation, Greater Bridgeport Personnel Director's Association, Manufacturers Association of Southern Connecticut, and The Directory of New England Manufacturers 1976, a total of 131 companies were identified as

having 50 or more employees according to the standard industrial code. The project was divided into two phases: Phase One was a survey of the larger employers with 50 or more employees. The results were at a level of 91.6% response, 120 of 131 companies responded.

Phase II entailed a survey of the smaller employers with 10-49 employees. These were selected from a total population of 373. One hundred were selected on the basis of a stratified random sampling technique. Thirty-one responses were received out of one hundred or 31% responses.

Some of the more important findings concerning the monitoring system and its feasibility were:

1. Employers with 50 or more employees do make projections concerning manpower requirements for one and three years hence.

2. They were willing to share this information with educational and training programs for curriculum development or revision.

3. They will respond to a checklist provided they remain anonymous and the data are not used for placement purposes.

4. Smaller employers with 10-49 employees are unable to project these requirements on a one year or three year basis. Generally, their requirements and needs fluctuate intermittently without any pattern.

5. The smaller employers are unable and/or unwilling to participate in such a study.

6. It is inadvisable to institute this system during the summer months.

The recommendations from the study were carefully derived and considered with the members of the User Panel. Among the general recommendations from the study was the evident need for further continued cooperation and communication between the training institutions and the business and industrial community. Also, there is need for further dialogue among the training institutions particularly in reference to program development and coordination.

Regarding graduates of the vocational training programs, it was also suggested that additional longitudinal follow-up of graduates be instituted to determine the patterns of their work experience and to gather relevant input concerning the training programs. The graduates might also be able to assist in providing data concerning occupational projections for specific fields.

Another recommendation entailed encouragement and support for further cooperative and alternate work experience programs for students particularly in those fields where facilities and materials are unavailable or prohibitively expensive for the training institutions to provide.

A total of 12 recommendations resulted from this research project. They were concerned with the monitoring system, counseling services, placement services, training programs, and cooperative work experience programs. These recommendations are concerned with and suggest means for improved vocational and training programs in the City of Bridgeport.

CHAPTER IV

Review of the Literature

Historically, there has been a need for cooperation between the educational sector and the business industrial sector of the community in the preparation of students for gainful employment. This need was recognized over thirty years ago by Zapoleon (1942) as demonstrated by his recommendations to foster such cooperation through the utilization of community surveys to delineate the specific employment needs within the local community. Data derived from such investigations were supposed to facilitate the planning by institutions for vocational education and by students in high school programs.

The implementation of these surveys was further promoted by Mitchell (1956) and later by Clark (1962). The thrust of their recommendations was geared to the assessment of job openings for high school students, however, and an attempt was made to elicit data for use by institutions beyond the high school level.

Studies of a similar nature and direction were also limited in scope and inconsistent in their frequency. Brochard's study of Middletown (1954), Smith's study (1953), Lee's Study of Pasedena (1956) as well as Elder's (1969) were representative of these limited time frames and purviews.

More recently, the importance of communication between business and educational institutions in sharing information for more effective planning by institutions and students has been highlighted by Goldstein (1971), the Assistant Commissioner for Manpower and Employment Statistics with the U. S. Department of Labor.

> "What can we tell about the future for which the schools are now helping young people to prepare? This is a question for all educators, but it is most acute for vocational education, which deals with the rapidly changing world of work. Only by keeping a sharp and constant eye can we do the best possible job today. . . . we must realistically take into account future employment opportunities and manpower needs." (1971, p. 18)

Simultaneously with this recommendation to look to the future in preparing students for the world of work came the current emphasis and programming in the schools for career education. Career Education encompasses vocational education but is more expansive in scope and school-age population served.

The fundamental concept of career education, as suggested by the U. S. Office of Education (1971) was: "all educational experiences, curriculum, instruction, and counseling should be geared to preparation for economic independence and an appreciation for the dignity of work . . ." (p. 2). The Office of

Education recommended career education on the basis of the inadequate preparation of many students for gainful employment upon leaving high school and college programs. These findings suggested that a significant number of students, 850,000 during 1970-1971, dropped out of the public school system, without sufficient skill training for employment. At that time the national rate of employment was slightly over 6 percent (Young, 1971) but for dropouts it was 21 percent. Thus, the importance of career education lay in ensuring that all students have specific job related skills by the time they completed a high school program or could legally drop out of high school. Similar recommendations were stipulated by the National Advisory Council on Vocational Education (1972).

The, then Secretary of Labor, Hodgson, suggested that during this decade occupational projections seemed most advantageous for graduates of vocational programs. Eight out of ten jobs during the 1970's and 1980's would be filled by individuals who do not have baccalaureate degrees (U. S. Dept. of Labor, 1972). While these projections were cited on one hand, the U. S. Commissioner of Education reported, at that time, that eight out of ten students needed occupational training, but two out of ten actually received it (Marland, 1972).

Within high school programs of study, many students are enrolled in a general curriculum of study which does not provide them with specific job related skills for employment. Conjunctively, however, it has been estimated that the general curriculum accounts for 70% of the dropouts, 88% of the Manpower Development and Training Act Trainees and 78% of the penal inmates. Even for students enrolled in vocational programs 50% are enrolled in courses which "cannot be considered as preparing them for a "vocation"--for employment-- for work." (Easterling 1974, 2)

One of the basic purposes of career education involves student acquisition of skills necessary for work. This objective reflects the vocational education component of career education programs.

The importance and need for career education has been supported by the U. S. Chamber of Commerce as well as the U. S. Office of Education and the National Advisory Council on Vocational Education. With this support has come the recommendation that rather than limit career education to in-school experiences and learning opportunities, a major component particularly reflecting the vocational education aspect, entails cooperation of business and industry. Thus, there is need for dialogue and communication between the business-industrial-labor sector and the vocational education sector responsible for preparing students for employment. The intent of this cooperation is to help students ascertain occupational information dealing with their demands and trends as well as facilitate effective educational planning on the part of vocational educators and planners.

As a result of the impetus provided by career education in recent years, there have been numerous information processing systems devised to facilitate student planning and institutional planning. The literature related to the former tends, however, to be generic in content and perspective. In introducing youngsters to the world of work, much of the information provided deals with job clusters, requirements for entry into these clusters and, in some cases, practical experiential participation in work opportunities which are related

to these clusters through released time programs, distributive education and cooperative work experience programs.

Information systems devised, however, for these purposes have generally dealt with national and regional occupational trends and requirements. They have been concerned with helping a youngster select an occupational role for participation in the labor force. The emphasis has been accorded to familiarizing students with the varieties of work and the development of tentative career choices. Harris (1968) Tiedeman (1970)Norris (1972), and ECES, as well as Project View (Policy Group 1975, IV p. 9), and others are concerned primarily with computer information systems for use in counseling, and student planning sessions. Project VIEW, for example, provides descriptions of 375 occupations which are most frequently entered by residents of Connecticut.

While this information and these systems are useful to students in helping them to understand the world of work, the systems lack relevance to local conditions of employment. The specific data on employment trends within the local community in which youngsters must ultimately secure employment are not programmed into these systems. Thus, in many cases, therefore, students are making these choices unmindful and unaware of their prospects in their own communities. In addition, these systems are not designed to provide data of a useable nature for vocational education planning committees and groups.

Some state department of labor have attempted to remedy this dearth of information by studying local employment conditions, trends, and prospects. Studies by the state of California, Idaho and Nebraska (Norris 1972) tend to typify these thrusts. These studies do not, however, provide the kind and specificity of data geared to the local community. Again their descriptions are generic and focus upon occupational groups, projectional data, and unemployment data which are seemingly of little practicality to vocational planners and students since they tend to reflect regional demands within a state but do not specify the local demands for a city or town. In addition, the focus of the data is upon industries and generally not occupations. It is further restricted to participating employers and areas, not specific communities. Consequently, the dependability and feasibility of this industrial data for planning vocational education programs are somewhat tangential.

This does not mean to suggest, however, that the public schools are unmindful of the need for this information but may lack the personnel and financial resources to accomplish these same objectives. For example, the State Department of Education in Connecticut has been directly involved in the implementation of more effective delivery systems for vocational education, expansion of the population served, and utilization of vocation training resources (State Board of Education 1975). Needs assessment has been suggested also by the New Jersey State Department of Education to determine the size of the discrepancy between what actually exists in terms of job opportunities in the world of work and what educational programs are, in fact, providing in vocational education. In its attempt to promote needs assessment to identify perceived needs and expressed needs of a school district, the New Jersey State Department of Education has outlined specific steps in the needs assessment process: reasons for the discrepancy, generation of alternatives, selection of alternatives, implementation and evaluation (1975, 5, & 6).

A few specific studies related to the determination of employment prospects within locales served by community colleges have been conducted in recent years. Although these studies were restricted to vocational opportunities pursuant to the training programs available in these colleges, the methods, techniques and perspectives of these projects were similar in nature and intent to the present study and suggested specific details for implementation in the present study.

In a study at San Diego Community College, Heinkel attempted to reduce the discrepancy between the realities of the job world and the educational institution. Specifically he sought to promote the effectiveness and efficiency of the vocational education programs. To accomplish these objectives a series of seven questionnaires were constructed and sent to residents of the district, employers, current and former students, instructors, counselors, and administrators. These questionnaires were designed to elicit information which could be utilized for the purposes of educational planning. Essentially educators would learn what students seek in potential employers, what skills are considered most important by the educating institutions and the employers, and the employment demand for graduates of various occupational programs. (Heinkel 1973, p. 2).

Based upon the assumption that three out of four people are employed in business which have in excess of 20 employees, Heinkel employed a modified random sampling technique to survey the geographical region served by the college. Of the more than 20,000 employees with more than 20 employees in the region, he surveyed 2 1/2 percent or 500 employers.

He attempted to obtain the following information from each employer: name, size, number of job openings, job titles and future expectations. This study was designed to provide a list of job openings, the current supply available, and job openings not requiring specific training. Employers were asked to give the number of employees for 1971/72 and estimates for 1974/75. He found, however, that employers were hesitant to respond to a lengthy questionnaire and that the format should be simple and easy to read. Further, it was determined that a definition of terms, such as vocational education, was essential. (Pages 15-19).

While this was a significant attempt at providing useful information for students and educators, the size of the sample selected, 2 1/2 percent did limit the generalizability of the results. Secondly, employers have been hesitant to divulge the size of work force but rather prefer to identify the number of employees in generic terms, such as more than 20 or more than 50. Another limitation involved selection of the sample. How the companies were actually selected was not identified. In addition, many of them preferred not to be "listed" as having employment opportunities available. The intent of this study was to update the 500 employees information periodically but not to expand the scope nor to survey smaller companies.

In another study at McClennan Community College in Waco, Texas, Ferguson et al (1975A) studied the geographical region of the community college to determine the number and types of jobs and data to make projections regarding potential

increases and decreases. After enlisting the support of the local Chamber of Commerce and Community Groups, a questionnaire was devised and tested. From the list of Texas manufacturers of employers with 50 or more employees, the appropriate businesses were contacted by phone initially and then mailed a questionnaire. Of the 142 called, 127 responded.

Based upon the assumption that larger employers could provide accurate data about employment trends, the information was used for educational planning. The categories of manufacturing and wholesale and retail trade accounted for the majority of the responses.

Limitations similar to those in Heinkel's study were apparent in Ferguson's as well as some additional ones. For example, no attempt was made to integrate data from smaller employers in the area served by the college. No attempt was made to integrate data available from other regional groups or the state labor department. In addition, there was no indication of a continuous monitoring function in the study. Finally, no provision was made for validation of the data obtained. In its scope, it was also restricted to programs provided only through the college and did not deal with high school vocational programs.

In summary, therefore, the literature related to vocational monitoring systems, employment projections, and vocational training tends to range from exhortatory statements concerning the need for accurate and specific data to some technically limited attempts conducted by some public schools and community colleges.

The present study was designed to eliminate many of these limitations and to enhance the data for vocational planning by institutions and students by providing relevant, continuous, and useable information.

CHAPTER V

Research Methodology

Introduction

The foremost objective of the research was to develop a monitoring system for vocational education and training in the City of Bridgeport. After the system was devised, it was to be tested out in the city to determine its practicality and feasibility for continuous maintenance and expansion. Upon completion of the testing, the researchers would make recommendations concerning the system and constraints upon it.

To accomplish the research objectives, the project was divided into four phases. Phase One involved an intensive examination of relevant literature and research as well as interviews with key personnel representing the institutions, the city, and the business-industry sector. Phase Two entailed development of the system, selecting of a classification system, development of the survey instrument, and piloting of the instrument. In Phase Three the survey was sent out and the data analyzed. Phase Four was concerned with synopsis of methods, goals, and findings and recommendation compiled in the form of a final report.

Analysis of Previous Research

After investigation of the previous studies and community job surveys in the extant literature in the field, relevant findings from these studies, as well as useful techniques and methods, were employed in the present study. Simultaneously, a series of interviews were conducted by the researchers with personnel with expertise in this area and with people knowledgeable about the City of Bridgeport. Interviews were held with William Hawkins, Executive Director of Bridgeport Area Chamber of Commerce, William Mulvihill at the National Alliance of Businessmen, Randy Caballero, Acting President of Bridgeport Economic Development Corporation, William H. Taft, Executive Vice President of Manufacturers Association of Southern Connecticut, Ralph LoStocco, past President of the Greater Bridgeport Personnel Directors Association, Hyung Chung, Program Director, Job Market Information Center at the University of Bridgeport, Stanley Kamykowski, City of Bridgeport Manpower Program, Mrs. Louise Johnson, Assistant Director of the Bridgeport Office of the Connecticut State Employment Service, Joseph Bonitatebus, Director of Vocational and Career Education, City of Bridgeport, Rose Januska, President of the Greater Bridgeport Personnel Directors Association, Edward Wasil, Assistant Director, Bullard Havens Technical School, Richard Wilson, Office of Research, State Department of Education and Al Horowitz, Office of Research, Connecticut State Labor Department. In all of these cases the project was described, data and relevant materials obtained to further the study.

Research Population

After these steps had been carried out, it was decided that contact with the major employers in the city would provide the relevant data to determine anticipated openings for 1977 and 1979. Using the list of manufacturers from the State Department of Labor, and lists from the Chamber of Commerce, BEDCO, and the Directory of New England Manufacturers for 1976, it was decided to conduct two surveys. The first survey was designed to obtain data from the larger employers, those employing 50 or more in the city. It had been suggested in Ferguson's study (1975 A) that the larger employers would provide information about trends more viably than smaller ones.

Utilizing the lists and cross checking them, a list of 145 companies was devised which covered the entire population for the city of employers with 50 or more employees. Each company on the list was contacted via the telephone and asked to participate in the study. During the process of these initial calls, it was determined that some companies had fewer than 50 employees and were thereby eliminated. Thus, this final population consisted of 131 eligible companies all of which were sent a checklist devised by the researchers after it was piloted with the User Panel. The checklist encompassed occupational specialities for which training, vocational education, or courses were provided by the participating institutions and used the occupational nomeclature and nosology of the State Department of Education in the Vocational and Career Guide for Connecticut. A copy of the checklist is enclosed in Appendix A.

On the checklist and for the purposes of this study, positions requiring vocational education and training were defined in generic terms. They were defined as "Positions requiring vocational training of a high school, technical school, community or junior college or six months to one year training program through a city agency prior to employment". The population was requested to check the number of openings for each specialty anticipated for July 1, 1977 and July 1, 1979. It was thought that by acquiring information for one and three years, the institutions and agencies would have relevant and usable information rather than highly speculative long range information projected five years agead. In addition, it seemed that if the system were utilized over a period of time, the data accummulated during that period would suggest particular increases and declines which would typify the Bridgeport employment market.

Specifically each participant was asked to:

1. Kindly check the number of job openings you can project for July 1, 1977 in your organization.

2. Kindly check the number of job openings you can project for July 1, 1979 in your organization not including the projection for July 1, 1977.

The data from the checklist were to reflect projections for two distinct times and be independent of each other.

Each checklist was coded and this was made known to the respondents. It was explained that each respondent would remain anonymous and not be mentioned specifically in the report. Only gross categories reflecting anticipated openings, such as secretaries 50, would be used. The purpose of the coding was to facilitate the follow-up after the mailing and to protect their anonymity.

Two cover letters were enclosed with the checklist. The first signed by Mayor Mandanici, William Hawkins, Executive Director of Bridgeport Area Chamber of Commerce, William H. Taft, Jr., Vice President of the Manufacturers Association of Southern Connecticut, and Rose P. Januska, President of Greater Bridgeport Personnel Directors Association outlined the need for cooperation and support from the business-industry sector. A copy is enclosed in Appendix B.

The second letter signed by the researchers provided information about the purposes of the project, the stipulation that no company would be specifically identified in the study, and directions for completing the checklist. A copy is enclosed in Appendix C.

The data would reflect the number of openings for 1977 and 1979, as well as suggest the degree and direction of anticipated trends in the specialties listed on the checklist.

The majority of the specialties of the checklist reflected established programs of vocational education and training or projected areas which might be implemented, if the need were identified. Some of the categories, it was anticipated, would not be found with larger employers or organizations such as barber and cosmetologist, but the checklist would be applied to smaller employers in the succeeding phase who might find them suitable and appropriate.

On the reverse side of the checklist, the respondents were asked to write in particular specialties not included on the checklist and for which there would be anticipated demands. The specific directions were: "Please add specialties you believe will be needed in your organization not specified above." It was felt this could elicit additional data to supplement that from the boxes checked.

At the end of the checklist, a requested return date was specified, one week from the date of mailing with a return postage-paid envelope enclosed. In addition, a box was provided for respondents to check if they desired a copy of the data. Checklists were sent to the larger employers on June 28th. Approximately 70 were received within two weeks of mailing. At that time, a telephone follow-up was conducted two weeks after the initial mailing. This was supplemented by additional telephone follow-up over a period of two weeks. Within five weeks from the initial mailing, 120 responses were received out of 131 mailed out. Thus, a total of 91.6% response level was achieved in Phase One of the application of the checklist.

On the basis of these highly significant results, it was decided to apply the checklist to the smaller employers in the 10-49 range in number of employees in order to ascertain answers to the following questions:

1. Do smaller employers make projections one and three years ahead regarding anticipated openings?

2. If they do, will they be willing to respond to a checklist as used in Phase One?

Thus, this phase was designed to answer these questions and also obtain data about specific job openings for 1977 and 1979.

Utilization of the lists from Phase One with the larger employers indicated that there were 373 identifiable employees in the city employing from 10-49 personnel. Since the purpose of the study was to test the monitoring system, it was decided to select 100 of the 373 companies with 10-49 employees for sampling, or approximately 26% of the total population. The purpose of this sampling was to ascertain answers to the questions proposed previously. The population of 373 companies was distributed in the following categories:

Industrial and Manufacturing	190	
Laundry and Dry Cleaning	16	
Automotive Repair	17	
Mechanical Workshops	55	
Retail and Wholesale trade and Miscellaneous	95	
	373	Total

A modified stratified random sampling technique was employed and approximately 25% of each category was sampled as follows:

Industrial and Manufacturing	48	
Laundry and Dry Cleaning	6	
Automotive Repair	7	
Mechanical Workshops	15	
Retail and Wholesale trade and Miscellaneous	24	
	100	Total

As in Phase One, each company was contacted by telephone in advance to determine whether they would be willing to participate. Of the 100 contacted, 65 agreed to participate. One week and two weeks after the mailing, those not responding were followed up via telephone, essentially the same as was done in Phase One with the larger employers. A total of 31 responses were received from the 65 who received the checklists. Of the 31 replies, 10 were blank or unusable. Thus, of the 100 so contacted, the response rate was 21%.

Final Compilation of the Data

Upon completion of a one-month period, Phase I was terminated. The same was true of Phase II in which one month was allotted for the mailing, first telephone follow up, and a second telephone follow up.

At this point, the researchers reviewed the checklists and conducted a tabulation of the responses. The resulting quantitative analysis was designed to determine the feasibility and practicability of the monitoring system with both populations. On the basis of the analysis, indicators were derived concerning the monitoring system. Particular constraints and problems were identified which might inhibit or prevent maximum effectiveness of the system in future applications of these techniques. A complete analysis of the data from Phase I and II are included in the next chapter, "Analysis of the Research Findings".

CHAPTER VI

Analysis of Research Findings

The analysis of the research findings discussed in this chapter is divided into specific subsections related to different phases of the research program. Part I deals with the findings concerning the monitoring system and data derived from the final survey, that of the employers with 50 or more employees. Part II focuses upon the second phase of the survey application specifically with the smaller employers with 10-49 employees in the City of Bridgeport. Part III is concerned with general findings.

Part I
Survey of larger Employers
50+ or more employees

In the survey of the larger employers, those with 50 or more employees, 131 checklists were mailed out to prospective participants. Of the 131 mailed, a total of 120 responses were received for a response rate of 91.6%. On the basis of these results, it was found that these employers can and do make projections for one and three years. They do have specific data available for these projections. It was also found that they demonstrate a highly significant degree of willingness and cooperation in sharing their data with representative from educational and training programs.

On the basis of the 131 calls made to the employers to enlist their cooperation prior to the mailing of the checklist, many employers expressed concern regarding the confidentiality of their response. They did not want to be identified specifically in the report because they did not want their competition to know of their anticipated growth and business cycles over the next two years.

It was also found that they preferred not to specify the exact number of employees currently employed in their organizations. They preferred to be identified only as having more than 50 employees.

Another finding or at least a tentative finding from the study was that the advanced phone call and follow-up phone calls seemed to facilitate promptness in responding. It also seemed to promote a high degree of response, 91.6% in this case.

The high degree of response seemed to suggest that a cover letter endorsing the research facilitates the responses. In this study the cover letter endorsing the research entailed cooperation from the mayor, the Chamber of Commerce, Manufacturer's Association, and the Personnel Director's Association. Thus, it suggested involvement, interest, and cooperation from significant and visible sectors of the community.

Rather than sending the checklist to the Chief Executive officer of the organization, such as the President or Vice President, direct contact was established with the individual in charge of personnel. The checklist was sent to this person and in the event of needed follow up, this specific individual was contacted. This precluded loss of the checklist within the organizational structure and facilitated communications.

The researchers, in this case, worked within a restricted time frame. The researchers had to implement the survey during the summer months at which time their other obligations were at a minimum. Unfortunately, many businesses shut down or have staggered vacations during July and August when this research was conducted. As a result, the promptness in response was prohibited in some cases by these vacation periods. Thus, the summer months especially July and August are not the optimum time to conduct this kind of a survey.

It is important that the personnel engaged in the follow up, in this study, a graduate and undergraduate student, be trained for this process. In addition, a series of guidelines and specific questions should be prepared in advance in the event the respondent prefers to answer over the phone rather than return the checklist. See Appendix D for a copy.

Analysis of Checklist Data

In conducting this research it was found that the 11 companies which did not respond gave a variety of reasons for their lack of response, when telephoned in the follow up. Some companies with union contracts suggested that they were unable to respond to this checklist because their demands for employees were tempered by seasonal variations and thus, could not project one year ahead This was the case with construction companies in particular. Some large retail department stores with headquarters outside of the State of Connecticut were unable to respond because the data were not available to them. In addition, data were not available from some municipal, state, and federal agencies within the Bridgeport Community.

An additional finding was that three companies did not respond in the original phone calls because they had or were going to move out of the city to other locations. While constituting approximately 2% of the original population, the effect of their moving would have considerable impact in terms of employment, since they were companies with well over the minimum of 50 employees.

Analysis of the checklist data must be prefaced by a note of caution. Since the data were collected in July and August of 1976 with specific economic conditions existing at that time, there is need for tentativeness in utilizing these results. If the economic conditions improve or at least remain stable, then the data are reliable indications of future demands. If the business or economic indicators change, on the other hand, these data became speculative and may be open to fluctuation and change. In addition, participating institutions may have data and information from other sources such as trade associations which may moderate some of the findings of this study.

The general results seem to suggest an optimistic perspective for the period of 1977-1979 in terms of general business conditions for the larger employers. With a few exceptions, the general trends tend to indicate more employment opportunities in many categories in 1979 than in 1977.

Table I

Larger Employers with 50 or more Employees in City of Bridgeport

CATEGORIES	# of Responses 1977	# of Responses 1979	Mean # of Openings 1977	Mean # of Openings 1979
Accountant/Bookkeeper	42	44	120	172
Advertising Specialist	5	6	25	28
Architectural Draftsman	1	1	3	3
Auto Body Repair Specialists	2	1	6	3
Bank Manager	8	9	39	51
Baker	2	1	44	16
Barber	-	-	-	-
Biological Science Technician	-	1	-	3
Business Management Assistant	9	8	27	24
Carpenter	5	7	15	21
Child Care Specialist	3	2	-	6
Clerk, General (Office)	64	57	243	277
Clerk-Typist	52	52	219	263
Corrections Specialist	-	-	-	-
Cosmetologist	-	-	-	-
Decorator	-	-	-	-
Dental Hygienist	-	1	-	3
Draftsman	15	11	45	38
Electrician	16	21	48	68
Electronics Assemblers	8	10	44	87
Electronic Technician	5	9	18	37
Fashion Designer	-	1	-	8
Fashion Merchandiser	6	-	18	-
Floriculturist	-	-	-	-
Food Service Manager	4	2	12	6
Food Trades Worker	5	5	15	15
Geriontology Assistant	-	1	-	3
Hospital Administration Aide	-	1	-	3
Hospitality Administrator	-	1	-	3

Table I (cont'd)

	# of Responses	# of Responses	Mean # of Openings	Mean # of Openings
Hotel (Motel) Manager	-	-	-	-
Law Enforcement Specialist	3	2	9	6
Legal Assistant	-	1	-	3
Library Technical Assistant	4	4	12	12
Machinist	18	20	59	108
Mason	1	1	3	3
Mechanical Draftsman	9	19	27	30
Medical Lab (Asst., Aide) Tech.	2	2	11	19
Medical Record Technician	2	2	6	6
Mental Health Aide	3	3	9	9
Nurse, Associate Degree	3	5	22	28
Nurse, Practical	3	4	38	38
Nurse's Aide	2	4	16	41
Nursing Home Adm. Aide	1	1	3	3
Painter	7	10	21	30
Photographer, Commercial	1	-	3	-
Plumber	8	14	24	42
Printer	4	4	12	12
Retailer	2	2	8	11
Salesman-Marketing	18	19	59	67
Secretarial Administrator	10	12	37	46
Secretary, Executive	23	33	79	114
Secretary, General	37	38	126	157
Secretary, Legal	2	4	6	17
Secretary, Medical	3	2	9	6
Teacher's Aide	2	2	6	6
Tool and Die Maker	18	14	59	62
Welder	7	10	21	30
Word Processor	6	6	28	28

Analysis of the data in Table I indicated that the following response level for the 58 categories on the checklist: 53 were checked and for 5 no responses were provided. Consideration of the employment opportunities of some specialties tended to suggest that some, such as the five in this case, are not generally employed in the larger companies but in small shops of 10 or fewer people. This is especially true for barbers, cosmetologists, decorators, hotel and motel managers and floriculturists. Data on some specialties were not available due to a lack of response from appropriate employers.

Of the 53 categories check, there were from 5 to 64 responses for 23, 1-4 for 20, 2 responses for 1977 only and 8 responses for 1979 only. Thus, approximately 81% of the categories were checked by one or more companies for both 1977 and 1979. Only 10% checked 1977 or 1979 only and 8 of the ten checked the 1979 boxes. These results suggest, therefore, that the checklist did serve to provide an adequate and usable means for surveying the employment in the larger businesses employing 50 or more people in the City of Bridgeport.

The projected openings for 1977 and 1979 are included in Table II employing the means for each category. The openings are listed in descending order from those with the largest number to those with the least number. These data will be particularly useful to personnel interested in the specific number of openings anticipated. Analysis of the findings suggested that significant openings are available in categories related to secretarial, business services, and machine trades occupations for 1977 and 1979.

Some vocational specialties have no projected openings for 1977, but have projected openings for 1979. Although there are not a large number of openings available in each category, their significance lie in that they tend to suggest a more optimistic employment picture three years in the future. These categories are as follows:

Dental Hygienist
Fashion Designer
Geriontology Assistant
Hospital Administrative Aide
Hospitality Administrator
Legal Assistant

Some occupational categories by contrast, which were checked for 1977 but not for 1979, may suggest an oversupply of workers in these fields or less turnover in these fields. These categories were:

Fashion Merchandiser
Photographer, Commercial

Further analysis of the data in Table I tended to suggest that significant growth, though not statistically significant, will occur in the following categories with 10% or more growth anticipated from 1977-1979.

Table II

Larger Employers with 50 or more Employees

Mean Number of Openings for 1977 and 1979

	1977		1979
100+	Accountant/Bookkeeper (120)	100+	Accountant/Bookkeeper (172)
	Clerk, General (243)		Clerk, General (277)
	Clerk, Typist (219)		Clerk, Typist (263)
	Secretary, General (126)		Machinist (108)
75-99	Secretary, Executive (79)		Secretary, Executive (114)
50-74	Machinist (59)		Secretary, General (157)
	Salesman, Marketing (59)	75-99	Electronics Assemblers (87)
	Tool and Die Makers (59)	50-74	Bank Manager (51)
25-49	Advertising Specialist (25)		Electrician (68)
	Bank Managers (39)		Salesman, Marketing (67)
	Baker (44)		Tool and Die Maker (62)
	Business Management Assistant (27)	25-49	Advertising Specialist (28)
	Draftsman (45)		Draftsman (38)
	Electrician (48)		Electronic-Technician (37)
	Electronics Assemblers (44)		Mechanical Draftsman (30)
	Mechanical Draftsman (27)		Nurse, Associate Degree (28)
	Nurse, Practical		Nurse, Practical (38)
	Secretarial Administrator (37)		Nurse's Aide (41)
	Word Processor (28)		Painter (30)
1-24	Auto Body Repair Specialists (6)		Plumber (42)
	Architectural Draftsman (3)		Secretarial Administrator (46)
	Carpenter (15)		Welder (30)
	Electronic Technician (18)		Word Processor (28)
	Fashion Merchandiser (18)	1-24	Architectural Draftsman (3)
	Food Service Manager (12)		Auto Body Repair Specialist (3)
	Food Trades Worker (15)		Baker (16)
	Law Enforcement Specialist (9)		Biological Science Tech. (3)
	Library Technical Assistant (12)		Business Management Asst. (24)
	Mason (3)		Carpenter (21)
	Medical Lab (Aide) Technician (11)		Dental Hygienist (3)
	Medical Record Technician (6)		Fashion Designer (8)
	Mental Health Aide (9)		Food Service Manager (6)
	Nurse, Associate Degree (22)		Food Trades Worker (15)
	Nurse's Aide (16)		Gerontology Assistant (3)
	Nursing Home Administration Aide (3)		Hospital Administration Aide (3)
	Painter (21)		Law Enforcement Specialist (6)
	Photographer (3)		Legal Assistant (3)
	Plumber (24)		Library Technical Assistant (12)
	Printer (12)		Mason (3)
	Retailer (8)		Medical Lab (Aide) Tech. (19)
	Secretary, Legal		Medical Record Technician (6)
	Secretary, Medical (9)		Mental Health Aide (9)
	Teacher's Aide (6)		Nursing Home Administr. Aide (3)
	Welder (21)		Printer (12)
			Retailer (11)
			Secretary, Legal (17)
			Secretary, Medical (6)
			Teacher's Aide (6)

Accountant Bookkeeper
Advertising Specialist
Bank Manager
Carpenter
Clerk, (General)
Clerk-Typist
Electrician
Electronic Assembers
Electronic Technician
Machinist
Mechanical Draftsman
Medical Lab Aide, Technician
Nurse, Associate Degree
Nurse's Aide
Painter
Plumber
Retailer
Salesmen-Marketing
Secretarial Administrators
Secretary, Executive
Secretary, General
Secretary, Legal
Welder

(Note the particularly small number of responses)

These results tend to reflect some of the current projections for New England in general and the State of Connecticut in particular. Specifically significant growth is expected in business and clerical services. Health and manufacturing employment are generally expected to decline, but the data suggest job opportunities for 1977 and 1979 which may be due to retirements rather than growth.

As the data suggest, a number of positions will remain stable in terms of employment projections for 1979 but these figures may be considered tentative due to the limited number of responses received in these categories and, in view of the fact, that employment in some of these is generally obtainable in smaller companies with under 50 employees:

Architectural Draftsman
Food Trades Worker
Library Technical Assistant
Mason
Medical Record Technician
Mental Health Aide
Nursing Home Administrative Aide
Teacher's Aide
Word Processor*

*(Since this is a relatively new specialty, these data and projections may fluctuate with increased technology in business and industry and demands increase sharply.)

In the following categories, decline in the projections may reflect actual decline or a limited number of responses in these categories or limited applicability in larger companies. The results in this section are very tentative.

Auto Body Repair Specialist
Baker
Business Management Assistant
Draftsman
Food Service Manager
Law Enforcement Specialist
Secretary, Medical

Considering the purpose of this phase, to determine whether larger employers can make projections and share them with representatives of educational and training programs, it would seem that a monitoring system employing a checklist of this nature is practicable and usable. Data are available concerning projections and can be employed by training institutions to develop new curricula, as well as to revise and eliminate areas of possible decline. Information of this nature can be made available also to counselors, and placement personnel to ensure a more reasonable match between potential job seekers and actual positions available. In cases where training and facilities are not currently available, cooperative work arrangements may be investigated to prevent duplication of effort by institutions and employers and reduce educational capital expenses and yet ensure suitable training for prospective job seekers.

On the second part of the checklist, the respondents were provided an opportunity to write in specialties which were not on the checklist. It was the intent of the researchers to determine whether new fields or opportunities might be suggested by employers or specific areas of a shortage of personnel might be cited.

There was a total of 45 specific responses reported on the checklist response to the item concerning these specialties not included specifically on the checklist. The results are tabulated in Table III which indicates the categories and number of openings for 1977 and 1979. Examination of the table suggests that forty one of the 45 categories have openings for 1-3 personnel for 1977 and 1979 with the majority, 27, having only one opening, five have two openings, three have three openings and one with four openings, three with six openings and one with twenty-five openings.

On the basis of the numbers of openings and number of responses, bank tellers seem to be a highly potential area for employment. If the current growth continues, the number of openings is suggestive of a need for intensive programming to meet these needs.

Other areas with six openings which may have potential for employment were: custodians, foundry personnel, and medical technicians and assistants. These results may suggest areas for further consideration by the participating institutions.

Table III

Larger Employers with 50 or more Employees

Results of Written Responses on Phase I	1977	1979
Accounting Clerks	3	3
Assistant Warehouse Manager	2	1
Bank Tellers	25	27
Boiler House Operator	1	1
Coding Clerk	1	1
Commercial Artist	1	1
Community Advocate (Mental Health)	1	1
Computer Operators & Programmers	2	2
Credit Manager		1
Custodians	6	6
Dietitians ADA	1	1
EDP Operators	1	2
EKG Technicians	1	1
Engineers/Draftsmen	1	1
Food Trades Workers	1	1
Foundry Personnel	6	6
Groundskeepers	1	1
Hostess	1	1
Janitor	1	1
Key Punch Operators	2	2
Lab Technicians	1	1
Machine Mechanics	1	1
Machine Operators	4	1
Maintenance Mechanics	3	2
Material Handlers	1	
Matrons - Hotel	1	1
Mechanical Assemblers (Machine Tool)	1	3
Mechanics and Auto Machine	3	3
Medical Technicians and Assistants	6	6
Orderlies	1	1
Pressmen		1
Production Supervisors	2	
Purchasing Agents or Buyers	1	
Quality Controllers	1	
Receptionist	1	2
Respiratory Technicians (Inhalation)	1	1
Screw Machinists	1	1
Security Personnel	1	1
Sewing Machine Operators	2	2
Switchboard Operators	1	1
Telephone Operators	1	
Vehicle Mechanics	2	2
Waitresses	1	1

Part II

Survey of Smaller Employers 10-49

Upon completion of the survey of the larger employers, the researchers sought to determine the feasibility of using the checklist and monitoring system with smaller employers, employers with 10-49 employees. The researchers made the following hypotheses:

I. Smaller employers do not make projections for anticipated openings one and three years hence.

II. If they do make such projections, they will not respond to a survey instrument.

Since the fundamental purpose of this phase was to determine the feasibility of the monitoring system and specifically the checklist as the means of monitoring employment projections, the researchers defined the population for study and selected a sample with which to conduct the testing. Of the 373 employers with 10-49 employees, it was decided to select a sample of 100 to try the system. The 373 had been previously identified from the original lists used to identify the larger employers with 50 or more employees.

The population of employers within the city with 10-49 employees consisted of the following subgroups.

190 Industrial and Manufacturing
16 Laundries and drycleaners
17 Auto Repair Shops
55 Mechanical Workshops
95 Retail, Wholesale, and Miscellaneous

To try the system, it was decided to select a sample of 100 employers from the 373 to use in the study. A modified stratified random sampling technique was employed according to the following stratification:

Industrial and Manufacturing	48
Laundries and Drycleaners	6
Automotive Repair	7
Mechanical Workshops	15
Retail, Wholesale & Miscellaneous	24
	100 Total

All 100 were contacted by telephone according to the same procedures in Phase 1. Of the 100 contacted, 65 agreed to participate. Twenty-eight refused to participate or stated they could not make such projections. Seven or 7% had moved out of the city or were moving out.

Table IV

Smaller Employers 10-49 Employees

CATEGORIES	Projections July 1, 1977 # of Responses 1977	Projections July 1, 1977 # of Responses 1979	Projections July 1, 1979 # of Openings 1977	Projections July 1, 1979 # of Openings 1979
Accountant/Bookkeeper	6	7	18	21
Advertising Specialist				
Architectural Draftsman	1	1	3	3
Auto Body Repair Specialists	1	1	3	3
Bank Manager				
Baker				
Barber				
Biological Science Technician	5	4	15	12
Business Management Assistant				
Carpenter				
Child Care Specialist	1	1	3	8
Clerk, General (Office)	9	9	27	27
Clerk-Typist				
Corrections Specialist				
Cosmetologist				
Decorator				
Dental Hygienist				
Draftsman	2	3	6	9
Electrician	1	1	3	3
Electronics Assemblers	4	2	11	21
Electronic Technician	1	1	3	3
Fashion Designer				
Fashion Merchandiser				
Floriculturist				
Food Service Manager				
Food Trades Worker				
Gerontology Assistant				
Hospital Administration Aide				
Hospitality Administrator				
Hotel (Motel) Manager				
Law Enforcement Specialist				
Legal Assistant				
Library Technical Assistant				
Machinist	2	2	6	6
Mason				
Mechanical Draftsman	2	2	6	6
Medical Lab Aide,Asst.,Tech.	1	1	3	3

Table IV (cont'd)

CATEGORIES	Projections July 1, 1977 # of Responses 1977	Projections July 1, 1979 # of Responses 1979	# of Openings 1977	# of Openings 1979
Medical Record Technician	1	0	3	0
Mental Health Aide	1	0	13	0
Nurse, Associate Degree	1	1	16	16
Nurse, Practical	1	1	16	16
Nurse's Aide	1	1	16	16
Nursing Home Administration Aide				
Painter				
Photographer, Commercial		1		3
Plumber	1	1	3	3
Printer	1	3		
Retailer	1	9	8	32
Salesman-Marketing	9		27	
Secretarial Administrator		1		3
Secretary, Executive	1	5	3	15
Secretary, General	5		15	
Secretary, Legal				
Secretary, Medical				
Teacher's Aide				
Tool and Die Maker				
Welder	2	3	6	9
Word Processor				

Of the sixty-five checklists mailed, thirty-one responses were returned. Of the Of the thirty-one, however, ten were not usable. Thus, data were available from twenty-one. Of the 100 selected for sampling then, only 21 or 21% responded. Thus, the data tends to be very speculative in view of the limited number of responses.

Of the fifty-eight categories or specialties on the checklist, twenty-six were checked by the respondents. The responses, therefore, were limited to 45% of the items on the checklist. In all but three cases, the respondents checked projections for 1977 and 1979. Of the categories checked, there were from 5-12 responses in 6 categories, from 1-4 responses in 20, and data provided for 1977 only in three.

Since the overall response level was low, at 21%, and the distribution of the returns was limited in scope and was not representative of any one of the specific stratifications of the sample, these results are quite limited and do not lend themselves to specific conclusions concerning job openings or projections.

The results are tabulated in Table IV with the number of responses in each category and the number of projected job openings for 1977 and 1979 in smaller companies with 10-49 employees. Particular categories which suggested some possibly significant openings were in accountant/bookkeeper, business management assistant, general clerk, clerk typist, electronics assembler, mental health aide, associate degree and practical nurses, nurse's aide, salesman marketing, and general secretary. All of these categories with the exception of the mental health aide were identified in Phase I as having significant growth and employment opportunities for 1977 and 1979. No attempt was made to indicate the amount of projected increase in these specialties from 1977 to 1979 since the data were limited by the paucity of responses.

Considering this paucity of response over all in Phase II, the same cautionary note applies to the results of the written responses obtained on the second part of the checklist. The positions mentioned tend to indicate some employment opportunities which suggest very specific skills as requisites. The results are provided in Table V for 1977 and 1979.

Analysis of the data in Table V does not provide significant information for future program directions nor for job trends and projections. These results are disparate and do not lend themselves to any relevant interpretation because of the limited number of responses.

As in Phase I, all employers who did not respond or did not return the checklist were called twice as part of the folow-up procedure. Of the 65 who were sent the checklist, 34 did not respond and were so contacted. All of these 34 stated that they could not make projections for employment for the summer of 1977 or 1979. Generally, they hired when the need arose, as in the case of abrupt termination of an employee or if highly significant growth were indicated by increased demand in orders.

These results combined with the 28%, who at the outset stated similar reasons for not participating, constituted 62% of the sample of 100 selected from the defined population of 373 employers with 10-49 employees. These employers do not make projections one and three years ahead and thus, are not a viable means of input in the monitoring system. Data were not available in sufficient numbers from the group to be of significant help in curriculum revision or development of the educational and training programs.

Table V

Written Responses from Smaller Employers: 10-49 Employees

July 1, 1977	July 1, 1979
Auto Mechanics (2)	Auto Mechanics (4)
Cement Finisher	Cement Finisher
Computer Operator	Driver (Rigger)
Driver (Rigger)	Insurance Clerks (experienced)
Dry-cleaner	Jeweler
Jeweler	Plastics Fabricator
Plastics Fabricator	Roofing Applicators (3)
Printing & Die Workers 1-5	Siding Applicators (3)
Roofing Applicators (2)	Truck Mechanics
Specification Writer	
Truck Mechanic (1)	

Part III

General Findings

In summary, the response on Part I with the larger employers, with 50 or more employees provided highly specific and significant data concerning projections for 1977 and 1979. The response level of this phase was 91.6%, or 120 out of a total of 131. The degree of cooperation and support from the business-industrial sector of the community is particularly noteworthy and significantly higher than generally found in research studies of this nature. In addition, the written responses for specialties not included in the checklist did suggest some potential areas of program development for the future. This was especially apparent in the checked and written responses.

Phase II, in contrast, conducted with the smaller employers with 10-49 employees was not as successful. The response level was 21% or 21 responses out of a total of 100 contacts initiated through the modified random sampling technique employed with the population of 373 companies. The findings were, therefore, limited in scope, number of responses, and number of projected job openings.

The finding tend to confirm the feasibility and practicality of a monitoring system employing a checklist with the larger employers employing 50 or more personnel. Projections can be obtained for one and three year periods, as found in this study. In addition, the written response section of the checklist did provide a means for identification of new and promising areas of employment with implications for future program development.

The findings, at the same time, tended to indicate that a survey of the smaller employers, those with 10-49 employees, will not provide significant data concerning projected employment for one and three year periods. Thus, the monitoring system will not function effectively with this group since they were generally unable to make these projections.

Specific conclusions and recommendations are included in the chapter with the same title. These implications of the study were carefully considered with the User Panel and have input for vocational education and training specifically in the City of Bridgeport.

JOB SURVEY

Appendix A

Dr. W. Paul Maloney and
Charles A. Ekstrom

Definition: Positions requiring vocational training of a high school, technical school, community or junior college or 6 months to one year training program through a city agency, prior to employment.

Kindly check the number of job openings you can project for July 1, 1977 in your organization on the left.

Kindly check the number of job openings you can project for July 1, 1979 in your organization not including the projections for July 1, 1977.

CATEGORIES	Projections July 1, 1977					Projections July 1, 1979				
	0	1-5	6-10	11-15	16+ Please Specify	0	1-5	6-10	11-15	16+ Please Specify
Accountant/Bookkeeper										
Advertising Specialist										
Architectural Draftsman										
Auto Body Repair Specialists										
Bank Manager										
Baker										
Barber										
Biological Science Technician										
Business Management Assistant										
Carpenter										
Child Care Specialist										
Clerk, General (Office)										
Clerk-Typist										
Corrections Specialist										
Cosmetologist										
Decorator										
Dental Hygienist										
Draftsman										
Electrician										
Electronics Assemblers										
Electronic Technician										
Fashion Designer										
Fashion Merchandiser										
Floriculturist										
Food Service Manager										
Food Trades Worker										
Geriontologist Assistant										
Hospital Administration Aide										
Hospitality Administrator										
Hotel (Motel) Manager										
Law Enforcement Specialist										
Legal Assistant										
Library Technical Assistant										
Machinist										
Mason										
Mechanical Draftsman										
Medical Lab. Aide (Technician)										

CATEGORIES	Projections July 1, 1977					Projections July 1, 1979				
	0	1-5	6-10	11-15	Please Specify 16+	0	1-5	6-10	11-15	Please Specify 16+
Medical Record Technician										
Mental Health Aide										
Nurse, Associate Degree										
Nurse, Practical										
Nurse's Aide										
Nursing Home Administration Aide										
Painter										
Photographer, Commercial										
Plumber										
Printer										
Retailer										
Salesman-Marketing										
Secretarial Administrator										
Secretary, Executive										
Secretary, General										
Secretary, Legal										
Secretary, Medical										
Teacher's Aide										
Tool and Die Maker										
Welder										
Word Processor										

Please add specialties you believe will be needed in your organization not specified above.

A. July 1, 1977 _____

_____

_____

_____

B. July 1, 1979 _____

_____

_____

_____

Requested return date _____.
Return in postage-paid envelope to HECUS, 328 Park Ave., Bridgeport, Conn. 06604

Please check this box if you would like a copy of the report.

HIGHER EDUCATION CENTER FOR URBAN STUDIES
328 PARK AVENUE BRIDGEPORT, CONN. 06604
(203) 334-9348

THE
BRIDGEPORT
URBAN OBSERVATORY

Appendix B

Dear

In recent years there has been increased need for more adequate communication and planning between the educational and business sectors in preparation of students for gainful employment. Specifically, projections of future occupational openings in the business-industrial sector and projected manpower from school and college programs are necessary for maximum manpower utilization.

To this end, Dr. Paul Maloney of Fairfield University, and Dean Charles Ekstrom of Housatonic Community College, have been engaged by the Urban Observatory to conduct a test survey and design a workable system to determine these projections in the City of Bridgeport on a continuing basis. The Urban Observatory is one of 17 such facilities in the country designed to facilitate research of relevance to the local community and to resolve issues of interest through cooperation among colleges, cities and business and industry.

We encourage your support of this community effort and extend our thanks for an early response to this questionnaire. We all need this information!

Cordially,

John C. Mandanici
Mayor, City of Bridgeport

William L. Hawkins
Executive Vice President
Bridgeport Area
Chamber of Commerce

William H. Taft
Executive Vice President
Manufacturer's Association
of Southern Connecticut

Rose P. Januska
President, Greater
Bridgeport Personnel
Association

VOCATIONAL EDUCATION INFORMATION SYSTEM

Purposes of the Study:

To: 1) Develop a Vocational Monitoring System to continuously assess the occupational projections for jobs in the City of Bridgeport and potential growth fields.

Jobs Defined: Positions requiring vocational training of a High School, Technical School, Community or Junior College or 6 months to one year training program through a city agency prior to employment.

2) This information will be used by schools, colleges, and training institutions to restructure and re-define vocational educational programs to meet these community needs.

Instructions: 1) To these ends you are asked to complete the enclosed questionnaire and enclose it in the postage paid envelope.

2) Complete anonymity and confidentiality will be maintained. No specific business or industry will be identified. Gross categories such as secretaries and the number of openings will be used.
Secretarial openings -- 50.

3) Each questionnaire is coded specifically for the purposes of follow up to insure adequate response to the questionnaire.

4) We will appreciate your taking the time to contribute to this joint effort of the educational institutions and the businesses and industries of Bridgeport as soon as possible. Won't you complete this right now?

We thank you for your anticipated cooperation.

W. Paul Maloney Ed. D.
Assistant Professor
Fairfield University

Charles A. Ekstrom
Dean, Housatonic Community College

Project #9

Vocational Monitoring System

Telephone follow-up for Job Survey

1. Identification
   Your name -- then calling on behalf of Dr. Maloney, Fairfield University and Dean Ekstrom Housatonic Community College.

2. Ask for person identified on index card -- refresh his/her memory about previous telephone contact asking for their participation and purposes of the project -- identification of occupational projections for July 1, 1977 and July 1, 1979.

   a. define job according to definition used on checklist.
   b. insure confidentiality of response

3. Explain that the purpose of the follow-up is to ensure representativeness of response and maximize the effectiveness of the monitoring system and projections.

   a. realizing the busy tempo of the time during the summer months and to meet the deadline of the project, ask if they would be willing to respond over the telephone.

   b. you will be willing to read the checklist items to them -- take 5-10 minutes to complete it.

4. Follow the checklist items

   Projections for July 1, 1977 Projections for July 1, 1979

   Additional positions not covered on this list.

   July 1, 1977
   July 1, 1979

   Copy of checklist results. Yes -- No

5. If unwilling to respond over telephone will they facilitate response to checklist as soon as possible.

6. Thank them for their assistance in this project.

Enter results on a checklist with the appropriate code indicated on the index card and check off completion of checklist on card.

VOCATIONAL EDUCATION INFORMATION SYSTEM

PHASE II: This is the second phase in the development of a vocational monitoring system for vocational education in the city of Bridgeport. In Phase I all employers with 50 or more employees were surveyed. The 89 percent response to the survey was encouraging and very helpful. Your partication in this phase, surveying employers with 10-49 employees, will be appreciated.

Purposes of the Study:

To:

1) Develop a Vocational Monitoring System to continously assess the occupational projections for jobs in the City of Bridgeport and potential growth fields.

Jobs Defined: Positions requiring vocational training of a High School, Technical School, Community or Junior College or 6 months to one year training program through a city agency prior to employment.

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Secretarial openings -- 50.

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We thank you for your anticipated cooperation.

W. Paul Maloney Ed. D.
Assistant Professor
Fairfield University

Charles A. Ekstrom
Dean, Housatonic Community College

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